

REMARKS

Claims 1-33 are pending. Applicants note with appreciation the allowance of claims 6-11 and 22-24 if rewritten in independent form. Accordingly, claim 24 has been amended to include the limitations of independent claim 17. Claim 6, from which claims 7-11 depend, and claim 22, from which claim 23 depends, continue to be dependent on their respective base claims 1 and 17 which are amended herein for reasons discussed below.

In the Office Action, claims 1-5, 12-21 and 25-33 are rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 6,014,904, to Lock (hereinafter referred to as the Lock patent) in view of U.S. Patent No. 6,317,517, to Lu (hereinafter referred to as the Lu patent). These rejections are believed to be overcome in view of amendments to claims 1, 12, 17, 25 and 29 herein. Applicants respectfully request that the amendments to claims 1, 12, 17, 25 and 29 be entered after final since they recite limitations such as the use of data comprising a plurality of clusters, and a density estimate characterized by a three-dimensional plot depicting peaks and valleys to identify clusters, as recited in the original, allowed claim 6, and therefore should not warrant additional searching by the Examiner.

Attorney for Applicants thanks the Examiner for the courtesy of a telephone interview on March 4, 2005 and for the interview summary mailed on March 9, 2005. In the Office Action, the statement of reasons for indication of allowable subject matter stated that none of the prior art disclose or fairly suggest "wherein data comprises a plurality of clusters and said density estimate is characterized by a three-dimensional plot depicting peaks and valleys, said identifying step comprising locating valleys in said density estimate and identifying each of said plurality of clusters as being separated from the others by at least one of said valleys," as recited in claim 6. During the interview on March 4, 2005, however, the Applicants discussed the patentability alone of the use of three-dimensional plots to identify

clusters in two-dimensional data. For example, during the interview, Attorney for Applicants directed the Examiner's attention to the data plot and corresponding one-dimensional histogram depicted, respectively, in Figs. 3A and 3B of the Lock patent, and the three-dimensional density estimate and corresponding two-dimensional histogram depicted, respectively, in Figs. 3 and 5 of the present application. Attorney for Applicants emphasized that the data analysis described in the Lock patent employs only one-dimensional data. Attorney for Applicants also emphasized that the data plot of one-dimensional data using Cartesian coordinates was not to be confused with two axes (e.g., the x-axis and the y-axis) of a two-dimensional histogram, and that the Lock patent did not disclose or suggest the use of histograms other than the one-dimensional type of histogram or three-dimensional data plots such as the density estimate depicted in Fig. 3 of the present application. In the interview summary mailed on March 9, 2005, the Examiner acknowledged the "three distinct axes" shown in the two-dimensional histogram depicted in Fig. 5 of the application, which are also shown in the three-dimensional density estimate depicted in Fig. 3 of the application, as being different from the Lock patent. Thus, the independent claims 1, 12, 17, 25 and 29 have each been amended to recite the essential elements of allowed claim 6 wherein "said data comprises a plurality of clusters" and "said density estimate is characterized by a three-dimensional plot depicting peaks and valleys." Accordingly, these independent claims 1, 12, 17, 25 and 29 and their corresponding dependent claims 2-11, 13-16, 18-23, 26-28 and 30-33 are believed to be allowable and withdrawal of the rejection under 35 U.S.C. §103(a) is respectfully requested.

It is to be understood that, although the claims have been amended herein to expedite allowance of the application, Applicants maintain for the record that the Lock patent does not disclose or suggest the use of two-dimensional histogram, and that the Lu patent does not overcome the deficiencies of the Lock patent, for the reasons set forth in the response dated August 24, 2004. In view of the above, it is believed that the application is in condition for allowance and notice to this effect is

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respectfully requested. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number indicated below.

Respectfully submitted,


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